1.1 Radio Astronomy

1.1.1 Maintenance and Calibration

- DSS54 Q-band pointing was checked using ACME during ANTCAL period on DOY 024. A new pointing model needs to be derived. Q-band receiver performance was checked using STA DIR ACT period on DOY 020, performance nominal.
- Locally developed connection blocks for HEF antenna tested during RFC DEVELOPMENT periods on DOYs 014 and 019, and during STA DIR ACT period on DOY 024.
- Locally developed sidereal block for BWG antennas tested during ANTCAL period on DOY 028.
- RAC60A computer is still being repaired at CMF department. A new power supply has been ordered.

1.1.2 R&D, Outreach activities and Training courses

Mark5 Debian Etch s/w installation on R&D Mark5 recorder#2 in progress.

A collection of TDN connection blocks developed locally to support Reference Frame Calibration projects (Clock Sync and Catalogue Maintenance & Enhancement) with the HEF antenna are ready to be used. The EAC will not be longer used for these particular supports. MDSCC-RA department is currently imparting a real time training course among link controllers on the new observing procedures.

1.1.3 Observations

1.1.3.1 Host Country Spectroscopy

During this month no spectroscopy observations were performed with DSS-63 due to a problem with RAC60A computer. Only one DSS54 period was used for testing the new Host Country spectrograph. SiO spectra were taken on the evolved star TXCam using simultaneously SPB500 and the new spectrograph.

DOY	minutes scheduled	minutes used	Percent good data	Activity	comments
026	450	450	100	"GBRA H/C D54"	New FFTs tests

1.1.3.2 Interferometry

MDSCC participated in 2 Very Long Baseline Interferometric (VLBI) observations (1680 min in total):

- RFC Clock Synchronization on DSS-65 (1 observation; 240 min): 100% data collected, performance of system nominal.
- RFC Catalog X/Ka on DSS-55 (1 observation; 1440 min): 15 sources lost (2% of total) due to DSS55 antenna drive problems (DR#M105630). First recording using 2 Mark5 modules, Field System swapped between modules without problems.